

mon shoreline species was *Eleocharis obtusa* (Willd.) Schult. Other species collected include *Typha latifolia* L., *Potamogeton nodosus* Poiret, *P. natans* L., *Alisma Plantago-aquatica* L., *Lophotocarpus calycinus* (Engelm.) J. G. Smith, *Sagittaria ambigua* J. G. Smith, *S. graminea* Michx., *S. latifolia* Willd., *S. rigida* Pursh, *Anacharis occidentalis* (Pursh) Victorin, *Eragrostis hypnoides* (Lam.) BSP., *Echinochloa pungens* (Poiret) Rydberg, *E. colonum* (L.) Link, *Leersia oryzoides* (L.) Swartz, *Carex gynandra* Schwein., *Cyperus acuminatus* Torr. & Hook., *C. esculentus* L., *C. ovularis* (Michx.) Torr., *C. odoratus* L., *Commelina hirtella* Vahl, *Juncus diffusissimus* Buckley, *J. effusus* L., *J. interior* Wiegand, *J. nodatus* Coville, *Polygonum coccineum* Muhl., *P. Persicaria* L., *P. punctatum* Ell., *Ceratophyllum demersum* L., *Nelumbo pentapetala* Walt., *Ludwigia alternifolia* L., *Nymphoides peltatum* (Gmel.) Britten & Rendle, *Heliotropium indicum* L., *Lindernia anagallidea* (Michx.) Pennell, *Utricularia biflora* Lam. and *Bidens frondosa* L.

A year after the filling of Lake Atalanta the following six species of aquatic and shoreline plants were present: *Potamogeton foliosus* Raf. var. *genuinus* Fern., *Kyllinga pumila* Michx., *Cyperus esculentus* L., *C. strigosus* L. *Leersia oryzoides* (L.) Swartz and *Nasturtium officinale* R. Br. The Devil's Den reservoir, two years after filling, had a sparse flora of *Chara* sp. and *Juncus effusus* L. The exact age of the reservoir at Cave Springs, which is somewhat older, was not ascertained. Eight species were collected here. These included *Chara fragilis* Desvaux, *Typha latifolia* L., *Potamogeton foliosus* Raf. var. *genuinus* Fern., *Leersia oryzoides* (L.) Swartz, *Cyperus strigosus* L., *Scirpus pallidus* (Britton) Fern., *Lycopus rubellus* Moench and *Mentha canadensis* L.

---

SENECIO TOMENTOSUS Michx., forma **alabamensis** (Britton) stat. nov. *S. alabamensis* Britton ex Small, Fl. Se. U. S. 1305 (1903).

Several collections from eastern Virginia, such as *Grimes*, no. 3552 from James City County, *Heller*, no. 850 from Isle of Wight County, and *Fernald & Moore*, nos. 15,162 and 15,163 from Nansemond County, show that *S. alabamensis* is at best an extreme glabrous or glabrescent form of the generally tomentose

*S. tomentosus*. Its stout caudex, coarse fistulous and soon very brittle and fractured stems, its leaf-outline and tothing, inflorescence, and hirtellous columnar achenes are inseparable from those of the much commoner typical *S. tomentosus*.—M. L. FERNALD.

---

## THE GENUS LIATRIS

L. O. GAISER

(Continued from page 263)

With *L. ligulistylis* (Nels.) K. Sch. abundant in the prairie provinces and the states immediately adjacent (Wisconsin, Minnesota, North and South Dakota) and thence southwestward through Wyoming, Colorado and northern New Mexico, there are found in Michigan, Illinois, Indiana and Ohio, (a geographically central region for the series *Scariosae*), what may be intermediates between *L. ligulistylis* and another species. Lunell described *Laciniaria scariosa* var. *Nieuwlandii* as having stem not unusually 1 m. high, simple or even branched (then with few-headed branches), with a few-headed, short-pedicelled, narrow short inflorescence to ample many-headed, long-pedicelled or long-branched one with an ample green foliage . . . involucre bracts bright green over the whole surface or with narrow almost entire purple margins. Examination of the type showed a striking similarity in the nine large heads to a robust form of *L. ligulistylis* with herbaceous phyllaries. That modifications of the type are easily found was recognized by Lunell since he described 3 forms: f. *borealis* (renamed *septentrionalis* (Amer. Mid. Nat. ii. 264 (1912))), f. *versicolor* and f. *gracillima*. In the note regarding f. *borealis*, Lunell made this remark: the "short stem and short, few-headed raceme bespeak its northern origin". The type of forma *borealis* Nov. 13, 1911, *J. H. Nieuwland*, no. 1680, from 7 Mile Road, Detroit, Michigan (N. D.) has 10 heads, and a few buds, with erect, suborbicular, only slightly scarious-margined phyllaries, and again resembles *L. ligulistylis* in general habit, though the leaves are numerous and linear-lanceolate, suggesting possibly a blending with *L. borealis* of the New England States. Other specimens seen have given a similar suggestion, as *Dr. Crossman*, without locality, Michigan (G). However,